

RESEARCH NOTES

Impact of passive and active promotional strategies on patient acceptance of medication therapy management services

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Abstract

Objectives: To assess the impact of passive and active promotional strategies on patient acceptance of medication therapy management (MTM) services, and to identify reasons for patient acceptance or refusal.

Methods: Four promotional approaches were developed to offer MTM services to eligible patients, including letters and bag stuffers (“passive” approaches), and face-to-face offers and telephone calls (“active” approaches). Thirty pharmacies in a grocery store chain were randomized to one of the four approaches. Patient acceptance rates were compared among the four groups, and between active and passive approaches using hierarchical logistic regression techniques. Depending on their decision to accept or decline the service, patients were invited to take part in one of two brief telephone surveys.

Results: No significant differences were identified among the four promotional methods or between active and passive methods in the analyses. Patients’ most frequent reasons for accepting MTM services were potential cost savings, review of how the medications were working, the expert opinion of the pharmacist, and education about medications. Patients’ most

frequent reasons for declining MTM services were that the participant already felt comfortable with their medications and felt their pharmacist provides these services on a regular basis.

Conclusion: No significant difference was found among any of the four groups or between active or passive approaches. Further research is warranted to identify strategies for improving patient engagement in MTM services.

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[text begins]

The value of pharmacist-provided medication therapy management (MTM) services has been demonstrated by(?) improving clinical outcomes related to medication use. Despite this, patient acceptance rates of MTM are lower than desired, varying from less than 1% to more than 50%, with an average of 14% to 18%. Variation results from differences in patient recruitment, opt-in programs versus opt-out programs, and differences in health care needs of those offered the service.⁴ With generally low acceptance rates, understanding how to effectively recruit patients into MTM programs is important.

Barriers to patient participation include lack of understanding of MTM, unclear provider roles relating to MTM, and patient perception of the need for such a service.^{5,6} Previous studies have identified the need to enhance marketing efforts by taking into account patients' perceptions and expectations. These studies have described the importance of clearly explaining the purpose of MTM, exhibiting a team-based approach to care, explaining why the pharmacist is the optimal health care provider to provide MTM, focusing on those services patients perceive as most beneficial (such as the personal medication list), using patient-friendly language (i.e.,

“medication check-up” and “medication management”), and increasing overall exposure to MTM.⁵⁻⁷

Although these studies have identified patient preferences for marketing techniques, no studies to date have been conducted to implement these strategies in a prospective, randomized way.

Objectives

The primary objective of this pilot project was to measure patient acceptance rates of pharmacist-provided MTM services by comparing four distinct promotional strategies: face-to-face offers, telephone calls, letters, and bag stuffers. The secondary objective was to evaluate reasons patients accepted or declined to participate in the service.

Methods

This study was approved by the Purdue University Institutional Review Board. A convenience sample of 30 locations of a grocery-store-based community pharmacy chain in Indiana was chosen to participate. Pharmacies were randomly assigned to one of the four promotional methods. These were categorized as either passive (letters and bag stuffers) or active (face-to-face offers and telephone calls) strategies.

Although four different strategies were used, the promotional messages and materials used uniform language preferred by patients in previous research.⁶ Before data collection, pharmacists at participating locations were trained on MTM delivery and use of the promotional approach assigned to their site. Pharmacists providing verbal promotional messages (telephone calls or face-to-face) received a brief script to follow with the patient and a list of follow-up points and questions for use if the patient was not immediately interested. Letters were mailed directly to patients from the pharmacy chain’s corporate office. Bag stuffers were attached to eligible patients’ prescription bags by pharmacy staff.

Because of staffing changes, one of the assigned sites did not participate. Data were collected from 29 locations over a 3-month period (January to April 2013). Adult, nonpregnant patients who had not received MTM services at any time in the past year were eligible for the study if identified by an MTM vendor and assigned to the study pharmacies for MTM as of January 2013. A total of 397 patients were assigned to the study pharmacies for MTM as of the beginning of the study period; 22 were excluded from the study as they had received an MTM appointment in the past year, and 25 patients were ineligible as they were younger than 18 years. The remaining 350 patients were included in this study.

The primary outcome measure was rate of patient acceptance of MTM, defined as those patients who came in and met with the pharmacist for their MTM appointment, with documentation completed and submitted during the 3-month study period. The time frame for this pilot study was chosen because the primary investigator (AH) was completing a 12-month residency program and this was a residency project.

All eligible patients were invited to take part in a brief telephone survey in conjunction with the offer to participate in MTM. Participants were asked to contact the primary investigator to receive more details about the survey, provide verbal consent, and complete one of the surveys. The survey was administered before the appointment if the patient accepted the offer. This allowed the survey to specifically elicit information about the promotional strategies rather than the service itself.

The surveys gathered information about why the patient accepted or declined the appointment (see the online Appendix for survey items, available on JAPhA.org in the Supplemental Content section). Demographic data collected included age, gender, race, ethnicity, education level,

number of medications, and chronic disease states. The survey required 10 to 15 minutes for completion by phone. All survey participants were offered a \$20 gift card as an incentive.

Patient acceptance rate reports were exported to Microsoft Excel 2010. Patient acceptance rates were compared among the four groups, and between the active and passive categories, using hierarchical logistic regression techniques to control for nesting of patients within pharmacy locations. These analyses were performed using SAS v. 9.3. Descriptive statistics were computed for information gathered from participant surveys using Microsoft Excel 2010.

Results

A total of 15 patients (4%) accepted the offer and completed their MTM appointment over the course of the 3-month study period. The mean age of patients accepting was 70 years, ranging from 49 to 85. Of those who accepted, the majority were in the telephone group ($n = 10$), followed by the letter group ($n = 3$) and the face-to-face group ($n = 2$). No patients assigned to bag stuffer stores accepted the offer.

Results of the hierarchical logistic regression showed no significant differences in pairwise comparisons of the four strategies. Telephone calls resulted in more MTM appointments than either bag stuffers (10 vs. 0) or face-face offers (10 vs. 2); however, neither comparison was statistically significant ($P = 0.0526$ and $P = 0.0805$, respectively). There was no significant difference between the active and passive promotional approaches when the approaches were dichotomized ($P = 0.26$). Age and gender were also included in the model but were not found to be significant predictors of patient acceptance.

A total of 14 patients participated in the survey; 10 respondents had accepted the service, while 4 participants had declined. The most frequently cited reasons for accepting were potential cost savings ($n = 7$), a review of how the medications are working ($n = 7$), the expert opinion of the

pharmacist (n = 6), and education about prescriptions, over-the-counter medications, vitamins, and herbals (n = 6). The most frequently cited reasons for declining the service were that the participant already felt comfortable with their medications (n = 4) and the perception that their pharmacist provides these services on a regular basis (n = 4).

Participants were also asked about their familiarity with MTM; 43% (n = 6) of participants indicated that they had previously heard of MTM services. Five (36%) participants stated that they had a caregiver who assisted them with their medications. Of those five, four stated that it would be helpful to involve their caregiver in the MTM appointment.

Six of the participants who accepted MTM services would have been willing to pay out-of-pocket for services before they had met with the pharmacist. Of those who stated a range they would be willing to pay for services, the mean amount suggested was \$32 (\$10–\$100).

Discussion

Although no significant differences were found in our analyses, the telephone outreach group garnered the most positive responses in our small pilot project. Telephone calls were active and pharmacist driven, allowing the pharmacist to proactively contact the patient without relying on the patient to visit the pharmacy. Because of the limited time frame of the study and the increased use of 90-day supplies of long-term medications, pharmacists likely had fewer opportunities to encounter patients face-to-face. Furthermore, prior research has described limited success with passive approaches.⁸ Interestingly, telephone calls resulted in more MTM appointments than the other “active” approach (i.e., face-to-face). While not significantly significant, this may have contributed to the nonsignificant difference between the dichotomized active and passive strategies.

Prior research has described patient preference for receiving information on community pharmacy services through bag stuffers, which was an unsuccessful approach in our study.⁹ However, our patient population had already been specifically identified by their Medicare Part D plan as likely to benefit from this service, so such a general approach may not have been successful.¹⁰ This group may benefit from speaking directly to a pharmacist who could explain particular service benefits and answer patient questions.

Reasons for patients declining MTM services were not unlike those previously described in research on community pharmacy services marketing.¹¹ Community pharmacists have described patients' perceived reluctance to participate in services related to long-term medications they have been using for an extended period.¹² Patients may feel falsely confident because of their familiarity with their medications. This points to the need for better patient education on the additional benefits of MTM beyond traditional prescription counseling.

Interestingly, more than one-third of the survey participants reported they believed having a caregiver present would be helpful. Future research should address MTM promotion techniques directed toward caregivers.

Limitations

There were several limitations to our study.

The acceptance rate was low, which was anticipated, as this is a common challenge to providing MTM services. Most of the pharmacists at the locations were new MTM providers, which may have contributed to slow uptake of the service. There was also a change in MTM eligibility directly before the study began, decreasing potentially eligible patients from more than 800 to 397. Patients had to proactively contact the investigator to complete the survey, likely reducing the response rate for this part of the study.

Additionally, the 3-month time frame for the study limited our primary analysis. Those patients who received a promotional intervention in the pharmacy (face-to-face offer or bag stuffer) may have had limited opportunity to receive the information, particularly if they typically receive 90-day medication supplies. Contact through letters and telephone calls could happen more frequently without relying on the patient coming into the pharmacy.

There was some crossover of promotional efforts in a limited number of patients. One of the pharmacists in the letter group additionally made telephone calls to patients, since this was a typical MTM recruitment approach in their usual practice (two of six accepted appointments). Because of this error in study execution, it is unclear in those cases which technique prompted the patient to accept the offer.

Conclusion

Our analysis found no significant differences between four promotional strategies aimed at increasing patient participation in MTM programs. The telephone group was more frequently successful in our small pilot study. This points to a need for more active outreach to patients to help them understand the value of MTM rather than using passive methods. Further research on MTM promotional strategies is needed.

Patients who accepted MTM were interested in cost savings, pharmacists' expert opinion, additional education regarding all medications, and reviewing how well medications were working for them. These benefits could be emphasized to patients eligible for MTM. Of those who declined, all of the patients stated their pharmacist already provides these services on a regular basis. This points to the importance of distinguishing between MTM and patient counseling.

Table 1. Pairwise comparisons among MTM promotional strategies in community pharmacies

Appendix 1. Accept and decline surveys

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Table 1. Pairwise comparisons among MTM promotional strategies in community pharmacies

Promotional strategies	Accepted offers N (%)	Pairwise comparisons			
		Telephone	Face-to-face	Bag stuffers	Letters
Active promotions ^a					
Telephone (n = 85)	10 (12)	...	0.080	0.053	0.170
Face-to-face (n = 85)	2 (2)		...	0.634	0.594
Total (n = 170)	12 (7)				
Passive promotions ^a				...	0.341
Bag stuffers (n = 95)	0 (0)				...
Letters (n = 85)	3 (4)				
Total (n = 180)	3 (2)				

Abbreviation used: MTM, medication therapy management.

^aDichotomized comparison of active versus passive interventions resulted in a nonsignificant difference ($P = 0.26$).

Appendix A: Accept and Decline Surveys

Accept Survey

How did you hear about this service? _____

Which of the following benefits of your pharmacist-provided medication check-up helped you to decide to make an appointment? Please indicate all that apply.

- ☐ One-on-one appointment with your trusted Kroger pharmacist
- ☐ Expert opinion of the pharmacist
- ☐ Complete medication list provided to you at the end of the appointment
- ☐ Pharmacist working with your physician to optimize your medications
- ☐ Organizing and simplifying your medications
- ☐ Education about your prescriptions, over-the-counter medications, vitamins and herbals
- ☐ Potential cost savings
- ☐ Review of how your medications are working for you
- ☐ Assessment of side effects
- ☐ Information about your specific disease states
- ☐ Potential review of labs in relation to your medication
- ☐ Recommendations for other preventative care services such as immunizations and screenings
- ☐ Other: _____

Have you heard of a pharmacist-provided medication check-up before scheduling this appointment?

- ☐ Yes
- ☐ No

Does someone else help you with your medications (spouse, child, care-giver, etc.)?

- ☐ Yes
- ☐ No

If yes, did you bring them to your appointment?

- ☐ Yes
- ☐ No

How many medications do you currently take? _____

Which of the following chronic disease states do you have? Please indicate all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Hypertension | <input type="checkbox"/> Arthritis (Osteoarthritis/Rheumatoid Arthritis) |
| <input type="checkbox"/> Hyperlipidemia | <input type="checkbox"/> Mental Health Disease (Depression, Schizophrenia, Bipolar Disorder, etc.) |
| <input type="checkbox"/> Diabetes mellitus | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Heart failure | |
| <input type="checkbox"/> Respiratory Disease (Asthma/ COPD) | |
| <input type="checkbox"/> Osteoporosis | |

What is your age in years? _____

Please select your gender:

- ☐ Male
- ☐ Female

Please indicate your race:

- | | |
|---|--|
| <input type="checkbox"/> White or Caucasian | <input type="checkbox"/> American Indian/Alaska Native |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> More than one race |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Unknown/Unreported |
| <input type="checkbox"/> Native Hawaiian/Pacific Islander | <input type="checkbox"/> Other: _____ |

Please indicate your ethnicity:

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino
- ☐ Unknown

What is your highest level of education?

- | | |
|--|--|
| <input type="checkbox"/> Elementary school | <input type="checkbox"/> Two year college degree (Associate) |
| <input type="checkbox"/> Some high school | <input type="checkbox"/> Four year college degree (BA, BS) |
| <input type="checkbox"/> High school diploma/GED | <input type="checkbox"/> Masters or doctorate degree |
| <input type="checkbox"/> Some college | |

Do you think this medication management service is of value?

- ☐ Yes
- ☐ No

If this service was not covered by your insurance, would you be willing to compensate the pharmacist for their time?

- ☐ Yes
- ☐ No

If this service was not covered by your insurance, how much would you be willing to pay for a medication check-up? _____

Decline Survey

How did you hear about this service? _____

Why did you decline to the pharmacist-provided medication-check up?

- ☐ Not sure why you need a medication-check
- ☐ Already feel comfortable with your medications and understand what they do
- ☐ Your pharmacist already provides these services on a regular basis
- ☐ Already getting these services from your doctor
- ☐ Pharmacists are not qualified to provide a medication-check up
- ☐ Lacking time/transportation to meet with pharmacist
- ☐ Other: _____

Which of the following benefits of a pharmacist-provided medication check-up would be most valuable to you? Please indicate all that apply.

- ☐ One-on-one appointment with your trusted Kroger pharmacist
- ☐ Expert opinion of the pharmacist
- ☐ Complete medication list provided to you at the end of the appointment
- ☐ Pharmacist working with your physician to optimize your medications
- ☐ Organizing and simplifying your medications
- ☐ Education about your prescriptions, over-the-counter medications, and herbals
- ☐ Potential cost savings
- ☐ Review of how your medications are working for you
- ☐ Assessment of side effects
- ☐ Information about your specific disease states
- ☐ Potential review of labs in relation to your medication
- ☐ Recommendations for other preventative care services such as immunizations and screenings
- ☐ Other: _____

Have you heard of a pharmacist-provided medication check-up before being offered this service?

- ☐ Yes
- ☐ No

Does someone else help you with your medications (spouse, child, care-giver, etc.)?

- ☐ Yes
- ☐ No

If yes, would it be helpful to offer them this service?

- ☐ Yes
- ☐ No

How many medications do you currently take? _____

Which of the following chronic disease states do you have? Please indicate all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Hypertension | <input type="checkbox"/> Arthritis (Osteoarthritis/Rheumatoid Arthritis) |
| <input type="checkbox"/> Hyperlipidemia | <input type="checkbox"/> Mental Health Disease (Depression, Schizophrenia, Bipolar Disorder, etc.) |
| <input type="checkbox"/> Diabetes mellitus | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Heart failure | |
| <input type="checkbox"/> Respiratory Disease (Asthma/ COPD) | |
| <input type="checkbox"/> Osteoporosis | |

What is your age in years? _____

Please select your gender:

- ☐ Male
- ☐ Female

Please indicate your race:

- | | |
|---|--|
| <input type="checkbox"/> White or Caucasian | <input type="checkbox"/> American Indian/Alaska Native |
| <input type="checkbox"/> Black or African American | <input type="checkbox"/> More than one race |
| <input type="checkbox"/> Asian | <input type="checkbox"/> Unknown/Unreported |
| <input type="checkbox"/> Native Hawaiian/Pacific Islander | <input type="checkbox"/> Other: _____ |

Please indicate your ethnicity:

- ☐ Hispanic or Latino
- ☐ Not Hispanic or Latino
- ☐ Unknown

What is your highest level of education?

- ☐ Elementary school
- ☐ Some high school
- ☐ High school diploma/GED
- ☐ Some college
- ☐ Two year college degree (Associate)
- ☐ Four year college degree (BA, BS)
- ☐ Masters or doctorate degree

